

Static Electricity: Objectives and Vocabulary

By referring to the various handouts, notes, lab activities and homework covered during this unit, then at the end of this unit of study, each student should be able to:

1. Define Static Electricity and explain how to produce it using examples from class or home.
2. Describe the characteristics of Static Electricity.
3. Explain what effect a charged object has on uncharged objects.
4. Know the different types of electric charges, positive and negative, and what causes them.
5. Explain the Law of Electrostatics and give examples.
6. Explain where static charges occur on objects.
7. Explain what an electroscope detects and how it works when inside/outside of a wire cage.
8. Know that static electricity can be conducted across object surfaces and through direct contact with charged objects or people.
9. Know what a Leyden jar is .
10. Know what a Van de Graf generator is used for.
11. Know who Nikolas Tesla was and his contributions to electricity.
12. Explain what a lightning rod is and how it protects buildings from lightning strikes.
13. Know the purpose of a ground wire and what a grounded electrical cord/plug looks like.

Vocabulary:

Static Electricity

Leyden jar

Charged object and uncharged objects

Van de Graf generator

Positive and negative charges

Nikolas Tesla

Law of Electrostatics

Lightning rod

Electroscope

ground wire/
cord/plug